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PRESIDENT'S MESSAGE by Bob Fulgency

I am pleased to report that outstanding west coast mycologist Dr. Tom Bruns has accepted an invitation to become a NAMA Institutional Trustee. Tom is a professor and associate chair at the Department of Plant and Microbial Biology at the University of California, Berkeley, and he is a past president of the Mycological Society of America. He received an M.S. from the University of Minnesota and a Ph.D. from the University of Michigan. He has published over 120 articles on fungal ecology and evolution and is best known for his work of ectomycorrhizal communities. I know Tom will make important contributions to NAMA's ongoing mission of supporting the scientific study of fungi.

Issues surrounding regulatory oversight of wild mushroom harvesting and sale still linger. The U. S. Food and Drug Administration (FDA) has published a food code (Code) for all levels of government to use as a model in fashioning food safety rules consistent with a national policy regulating foods. The Code covers all types of foods and food-related activities, including the harvesting and sale of wild mushrooms. It was most recently updated in 2009. The Code requires mushrooms picked in the wild to be individually inspected and determined safe by an approved mushroom identification expert. However, this rule does not apply to cultivated species that are grown, harvested, and processed in an operation regulated by a food industry agency; or to wild mushroom species that are the packaged product of a regulated food processing plant. To date, 48 states and territories have approved codes similar to this federal one. One of the shortcomings with the Code is that it doesn't specify requirements to becoming a so-called "mushroom expert", and identifies no authority to confirm that these requirements have been met. For this reason--among others-- the Code has proven unworkable, making it difficult or even impossible to legally sell harvested wild mushrooms in many jurisdictions.

In last year's January/February issue, I mentioned that NAMA has agreed to become a member of the Wild Harvested Mushroom Committee (Committee) of the Conference of Food Protection (CFP). This Committee came about to bring some clarity to the complex issue of regulating the harvesting and sale of wild mushrooms to the public. It was initially charged "to develop guidelines to help regulators address the issue of wild mushrooms in food establishments." The growing problem of safety associated with the unregulated sale of wild mushroom to the public was what generated CFP's interest.

The Committee's plan is to develop a blueprint that regulatory agencies can follow to allow them to exercise meaningful control over all facets of wild mushroom harvesting and distribution. At this time, the Committee intends to submit five recommendations to CFP for consideration. Of particular interest is the training of approved mushroom identifiers. Based on this plan, each state or region will be expected to develop a list of mushrooms that can be collected in the area. Further, it will be responsible for training candidates and subsequently test them for their knowledge of wild mushrooms. Training would impart information about species approved for harvesting, including: Latin and common name, characteristics needed for proper identification, differentiating characteristics of toxic and nontoxic lookalikes, determining the condition of any mushroom specimen, proper preparation and the understanding of the applicable regulatory scheme. Testing would cover subjects following Committee suggestions, including: mushroom anatomy, toxins and histories of poisonings, species habitat, areas to be avoided and proper collection techniques.

(To be continued in the next issue of The Mycophile)

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NAMA FORAY 2012 Mission Springs Campus *Mission Springs Meeting Room*

2012 FORAYS AND ANNOUNCEMENTS

May 28 - June 10: CORDYCEPS EXPEDITION TO TIBET. www.danielwinkler.com/cordyceps_expedition.htm

August 2-5: The NEMF 36th ANNUAL SAM RISTICH FORAY at East Stroudsburg, PA. www.nemf2012.org/Registration.htm for further information.

August 16-19: THE TELLURIDE MUSHROOM FESTIVAL. www.shroomfest.com

August 31-Sept 3: SOUTHWEST REGIONAL FORAY at Southwest Research Station, Portal, Arizona. Chief Mycologist is Dr. Jack States. Foray cost is $260 payable to NAMA. For registration information contact Ann Bornstein, 61 Devon Ct, Watsonville, CA 95076; annsticher@charter.net or call (831) 786-0782.

September 13-16: COMA FORAY in Hebron, CT with Chief Mycologist Gary Lincoff, Dr. Roz Lowen, John Plischke III and Bill Yule. Leon Shernoff and other mycologists will also be attending. Go to www.comafungi.org for a registration form.

Sept. 20-23: NAMA WILDACRES REGIONAL FORAY. Price is $225 per person. Contact registrar Glenda O'Neil at glendakoneal@yahoo.com or at 423-246-1882 and see website www.wildacres.org.

Sept. 27– Oct. 6: THE NEWFOUNDLAND MUSHROOM ADVENTURE (Canada) 9 days/nights, strong mycology focus with sightseeing, history, culture in this huge, forested, fungi-rich island in the Atlantic. Premium lodgings, food, foray transport. All-inclusive Cost Share Fee: $2,780 p/p dbl. occ. Organized by NAMA affiliate MycoAficionados of Mexico and Mexican Mushroom Tours. For details, contact Gundi Jeffrey and Erik Purre by email at mexmush@yahoo.com or go to www.mexmush.com.

Dec. 13-16: NAMA 52nd ANNUAL FORAY at Mission Springs in Scott's Valley, California www.namyco.org. Guest mycologists include Chief Mycologist Dr. Else C. Vellinga, David Arora and others.

MYCOLOGY WORKSHOPS AT EAGLE HILL 2012: For information go to http://www.eaglehill.us.
The Eagle Hill Foundation at the Humboldt Institute, located on the Maine coast between Acadia National Park and Petit Manan National Wildlife Refuge, is offering three mycology workshops for 2012. Scholarships are available.

Jul 29 - Aug 4: Mushroom Identification for New Mycophiles; Foraging for Edible and Medicinal Mushrooms
with Greg A. Marley and Michaeline Mulvey

Aug 5 – 11: Natural History of Fungi and Slime Molds
with Steven L. Stephenson

Aug 19 – 25: Coastal Maine Mushrooms and Microscopes Foray
with Rosalind Lowen and Dianna Smith

Join NAMA's Facebook page to learn about NAMA's upcoming events, post photos and converse about fungi.

http://www.facebook.com/groups/214397418588682/

NAMA's 52nd Annual Foray at Scott's Valley California, Dec. 13-16

Christian Schwarz writes: "Planning for **2012 NAMA Annual foray in Scotts Valley, California** is going swimmingly.

Our conference site, transportation, collecting permits (for the legendarily-difficult-to-persuade State Parks!), and just now, guest mycologists have all fallen into place.

David Arora (author of field mycology's piece du resistance, *Mushrooms Demystified*) will be our guest mycologist, and none other than Else Vellinga (of UC Berkeley) will be our head taxonomist. Other confirmed guests include such illustrious names as: Gary Lincoff (author of the *Audubon Guide to Mushrooms of North America*), Michael Beug, John Plischke III, Dennis Desjardin, and Darvin DeShazer.

One of the most spectacular habitats we will have access to is the Zayante Sandhills. These ancient, uplifted marine deposits are covered in maritime chaparral, disjunctive ponderosa pine groves, and ancient live-oak savannah, all. As you might expect, they also host a very unique suite of fungi, some of which are found nowhere else in California (much less the world). To boot, some fungi are much more common here than they are anywhere else in our area.

Be sure to register early, as this foray is sure to fill up quickly. This really will be a foray to remember, folks. Without further ado, here are some of the real stars of the show:"

Top left: *Amanita sp.* - an undescribed Lepidella endemic to the Zayante Sandhill habitat! Top right: *Boletus eastwoodiae*, a highly toxic, enormous (1 kg specimens are common), and very beautiful live oak associate. Bottom right: *Aureoboletus flaviporus*, a striking member of this newly erected genus. Bottom left: *Clitocybe odora*, a beautiful and uncommon blue mushroom that smells heavily of sweet licorice!

The North American Mycological Association
Larry Stickney Memorial Foray

Mission Springs Conference Center, Scotts Valley, California
Thursday, December 13th - Sunday, December 16, 2012

Ann Bornstein, Registration
61 Devon Ct, Watsonville CA 95076-1160
annstitcher@charter.net831-786-0782

Complete all 3 pages of this form and return it with your check payable to "NAMA Foray 2012"

Names: _____

Address: _____

City, State,
Zip: _____

Phone: _____

e-mail: _____

Names and club affiliation for name tags: _____

See page 3 for description of room options. Be sure to state 1st, 2nd and 3rd choices.

Foray Registration (non-refundable)	# _____	@	$95	each	$_____
Foray Room and Board: 3 nights and 9 meals					
Standard Room	# _____	@	$210	each	$_____
Economy Room	# _____	@	$135	each	$_____
Single Supplement		@	$100		$_____
Foray Waiver		@	$0		$_____
Reason _____					
NAMA Trustees meeting 2 nights and 6 meals					
Standard Room	#_____	@	$130	each	$_____
Economy Room	# _____	@	$ 95	each	$_____
Single Supplement		@	$ 60		$_____
NAMA membership (required if not current)		@	$35		$_____
Late Fee (after October 31)		@	$50		$_____
Mycology student discount		@	-$100		$_____
School _____				_____	
	TOTAL				$_____

Do you require vegetarian meals or have other dietary restrictions? _____

We must have a signed release for each person attending the foray. See next page.

Cancellation Policy: The $95 registration fee is not refundable.
Full refund of remainder until October 31
Refund of ½ remainder until November 16
No refund after November 16

Liability Release and Promise Not to Sue

I understand there is some risk in participating in a mushroom foray and conference; all those risks one assumes by being away from home, risks associated with moving about in fields and woods, risks involved in eating wild mushrooms, risks of losing personal property by theft or misplacement, and all other expected and unexpected risks. In registering for or attending this foray, I agree to assume total responsibility during this event for my own safety and well being, and that of any minor children under my care, and for the protection of my and their personal property. I release The North American Mycological Association (NAMA), its trustees, officers, employees, contractors, and all other persons assisting in the planning and presentation of this event from liability for any sickness, injury, or loss I or any minor children under my care may suffer during this event or as a result of attending and participating. I further promise not to file a lawsuit or make a claim against any of the persons listed above, even if they negligently cause me or my minor children injury or loss. Finally, I agree to hold NAMA harmless from any liability it may incur as a result of any damages to Hinton Training Center property, which I may cause. This release and promise is part of the consideration I give in order to attend this event. I understand it affects my legal rights. I intend it to apply not only to me but also to anyone who may have the right to make a claim on my behalf.

Signature 1: _____ Date: _____

Print Name 1: _____

Signature 2: _____ Date: _____

Print Name 2: _____

Volunteer Options:

If you can help in any way, please let us know. The volunteer time of our members is what continues to make NAMA forays such a success and great time for everyone. The coordinator will contact you with details prior to the foray.

Display & identification area:

Set up:_____ Assist identifiers:_____ Clean up:_____

Mycophagy:

Set up:_____ Preparation (Sat):_____ Clean up:_____

Bring mushrooms _____

Van Drivers (15 passenger vans) _____ [No special license required]

Other: _____

Room descriptions

All rooms have closets and dressers and come with bedding and towels.

Standard rooms have 2 to 4 beds and private bathrooms.

Redwood Lodge: 2 double beds per room. Private bath.

Laurel Lodge - 1st floor: 2 single beds per room. Private bath

Laurel Lodge - 2nd and 3rd floors: 3 singles and 1 double bed per room, private bath.

2nd floor is handicap accessible

Wellander - 1st floor: 2 room suites with double in each room or 1 queen and 1 double, 1 bathroom per suite.

Wellander - 2nd floor: 1 double and 1 single in each room, private bathroom.

All rooms have at least one bunk bed as well to accommodate 3 or 4 to a room

Frontier Lodge: 1 double and 1 single per room. Most have 1 bunk also. Private bath.

1 room is handicap accessible.

Central lounge with large fireplace.

Must drive about 2 mi to central part of facility for all meals and programs.

Economy rooms have 2 to 4 beds and shared bathrooms

Sequoia: 2 singles with 2 bunks, shared bathroom for 3 rooms

Fir, Pine, Oak, Hemlock: 1 single and 1 double per room with 2 bunks, private sinks, shared bathroom for 4 rooms

Cedar - 2nd floor only: 2 or 3 beds per room with 1 or 2 bunks, shared bathroom

1st Choice: _____

2nd Choice: _____

3rd Choice: _____

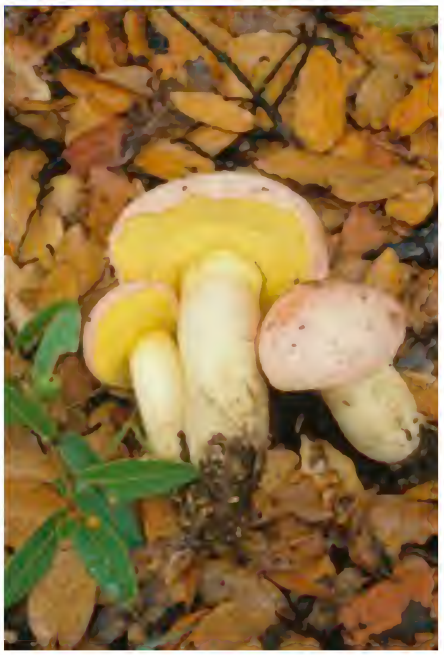
Put the following people in the room/suite with me/us

OR: assign roommates: Male _____ Female _____

SOUTHWESTERN REGIONAL FORAY, Portal, AZ (Aug. 31 – Sept. 3)

To register contact annsticher@charter.net or call (831) 786-0782

Amanita sp., found only once in the Chiricahua area



Boletus pulcheripes, new to the

Afternoon at the research station

All Photos by Bob Chapman

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Wildacres Regional Foray

September 20-23, 2012

Wildacres, North Carolina

To register, complete this form and mail with a check, payable to NAMA, for $225 per person to:

Glenda O'Neal

1038 Wateree Street

Kingsport, Tennessee 37660

Info: glendakoneal@yahoo.com

Phone: (423) 246-1882

Persons sharing a room may use the same form.

Name_____ Name_____

Male_____ Female _____ Male_____ Female_____

Address_____ Address_____

_____ _____

Phone _____ Phone _____

Email_____ Email_____

Dietary Requests _____ Dietary Requests_____

Bedding Preference: Double___ Single____ Bedding Preference: Double___ Single ___

I wish to room with _____.

Participants in this foray will be limited to 40 persons, double occupancy. There are no private rooms. The cost of the foray covers 3 nights lodging and 8 meals beginning with an evening meal on Thursday September 20 and ending with breakfast on Sunday September 23.

Liability waiver:

By signing below I release the North American Mycological Association, its officers, and members from any and all liability and loss arising from any accident, injury, or illness, which may result from activities of the NAMA regional foray at Wildacres.

Signature #1: _____ Date:_____

Signature #2: _____ Date:_____

Re-inventing NAMA for the Future by David Rust

NAMA needs an overhaul. I'd like to present some ideas for change with the hope that these points can be discussed by officers, trustees, and members before the next Trustees meeting. Some people believe that NAMA needs a new purpose and structure. I am one of those people.

NAMA faces several seemingly obvious issues: a severe decline in membership, failure to adapt to new technologies, lack of participation by members of affiliated clubs in NAMA activities, few ties to the professional world, and little or no direct communication with members and affiliated clubs. Technology has allowed most mushroom clubs to be on the cutting edge: hosting informative websites, sponsoring online discussion forums, participating in social media, creating spontaneous events, and delivering publications electronically. Frankly, clubs can get along without NAMA. Or can they?

Don't get me wrong, NAMA has a dedicated core of people who are passionate about its mission and future, people like Ann Bornstein who spends countless hours keeping tabs on and collecting dues from a thousand people and 75 affiliated clubs, Sandy Sheine, who devotes an extraordinary effort to education, and Michael Beug, the current editor of McIlvainea.

Through its network of members, NAMA acts as a central clearinghouse by creating programs, offering a comprehensive speaker's bureau, hosting a multifaceted website, online cultivation and discussion groups, publishing an online journal, and hosting regional forays and the annual foray where amateurs can work directly with professionals in a comfortable learning environment. Annual forays also serve as a place to socialize and exchange ideas.

Annual Dues Increase a Decade Later

In 2001, there was panic over finances at the annual trustees meeting. "NAMA is broke," they said. Dues were raised. Doubled, actually, from $17 to $32. Over the past decade, membership has fallen by half, and as a result, net revenue is stagnant. Some of NAMA's fixed costs – sending an annual roster, printing and mailing the journal *McIlvainea*, and printing and mailing the bi-monthly newsletter *The Mycophile* – have been eliminated or converted to electronic conveyance. The cost per member is dramatically lower than a decade ago.

The current dues structure should be updated, and dues lowered. This is necessary to broaden our membership base. Lower dues would be easier to sell to members of our affiliated clubs. These mushroomers represent our largest potential pool of new members. NAMA dues should be seen as an "add on" to local club membership. More reasonable dues would also be attractive to potential members who have no club nearby.

A suggestion has been made to lower dues for members of affiliated clubs to $20. NAMA could launch a membership drive to let people know about the services and programs we offer. We have the brochures...

Officers Term of Office

Frankly, three years is a long time in the life of any organization. NAMA needs to move quickly and steadily toward its goals. I propose we shorten the term of office from three to two years. New people on the Executive Committee would bring energy and new ideas. Shorter terms would give NAMA more flexibility.

Redistricting of Regions

NAMA's Regional Trustees are our boosters with local clubs. Often, they're the people communicating about NAMA activities and events as well. The regions were set up decades ago and have, to my knowledge, never been redrawn. One region has 20 clubs with nearly 4,000 members. Three regions have 19, 9 and 4 clubs respectively with a total of 4,551 members. Six regions have less than 500 members each. The regions should be rebalanced so that Regional Trustees have a manageable workload. Adding new regions may be necessary.

And, of course, the Region concept overlooks the vast number of mushroom enthusiasts in North America who are not members of an affiliated club. The Regional Trustees could contact people who are not affiliated with any club, but who have an interest in learning about mycology. Regions are based on contact by the Regional Trustees with clubs. There is little recruiting of non-affiliated mycophiles.

According to the NAMA policy manual:

> *Regional Trustees are tasked with promoting the growth and development of NAMA, working with Affiliated Clubs as*

follows: arranging to have Club events posted on the NAMA Website; sending NAMA information to the Clubs for publication in their newsletters, websites and message boards; requesting Clubs to place a link to the NAMA website on their websites and message boards; encouraging Clubs to have their members join NAMA and add NAMA membership applications to their membership drives; and work with the NAMA Membership Secretary to collect the NAMA club dues in a timely manner. In addition, Regional Trustees are tasked with identifying and contacting each non-affiliated mycological club to encourage it and its members to join NAMA, and provide any necessary assistance and/or paperwork, and submitting an annual report to the Board of Trustees.

It's unclear how many of these tasks actually get done. In recent years, Regional Trustees haven't had much direction. Regional Trustees can perform these tasks if encouraged to do so, given the tools, and perhaps a modest travel budget to visit area club meetings and events.

Building Stronger Bonds with Affiliated Clubs

NAMA does not communicate directly with our affiliated clubs. This is a key role of an umbrella organization. Affiliated clubs only have input to NAMA policy if a club trustee attends the annual trustee meeting. We need to ask more often, just how NAMA can help affiliated clubs on policy, insurance, access to mushroom collecting, and general best practices. Individual clubs need to be engaged year round and at the annual foray. More on this later...

How NAMA Plans its Annual Forays

NAMA has a new foray committee chair, Noah Siegel. This committee has a terrific opportunity to adopt some new practices. Long term planning would give professional mycologists more opportunities to attend. At the very least, NAMA should cover the people who put their energy into the event, with enough reward to the local club to entice them to do it all over again in 10 years or so. [In theory, the annual foray is supposed to rotate between Regions.]

The North East Mycological Foray (NEMF) works because its 18 clubs rotate foray hosting so that no club has to host more often than once every seven years. This model has worked since 1976, and people who have attended NEMF know that their forays are generally a great experience.

Most major organizations plan their major events for five years in the future. NAMA should almost always fully sponsor the annual foray with assistance of local clubs in the area, with a share of dividends and recognition going to those who provided the manpower and local expertise.

In the past 50 years, NAMA has held one major foray per year. Due to high travel costs, it has been proposed that we break up the annual foray into two or more smaller forays in different parts of the country. We could also expand the model of the Regional forays. Limiting participation to 40 NAMA members decreases overall participation.

Solving Issues Through Dialogue

At the annual Trustee meetings, business is addressed, but there never seems to be enough time to look to the future. Too many reports, not enough dialogue. I suggest changing the format to focus on issues, eliminate reports (they can be circulated before the meeting) and change the way the budget is discussed. Time spent on "this amount for your committee was in last year's budget. Do you still need it?" is a waste of energy. If a savvy treasurer looked at spending for the past few years and saw that line item was never used, just eliminate it and bring a proposed budget to the meeting. Most of the discussion centers around dealing with the shrinking level of revenue, which we know is directly caused by shrinking membership. Let's talk about how to fix that, instead!

NAMA PHOTO CONTEST 2011: Honorable Mention in Pictorial Group

Marasmius plicatulus *by Christian Schwarz*

Ramariopsis kunzei *by Dianna Smith*

Spathulariopsis velutipes *by Dianna Smith*

Second place in Judge's Option Category Of the 2011 NAMA Photo Contest:
Mushroom Books: Mine and Noah Siegel's

NAMA Launches Registry of Mushrooms in Works of Art

Mushrooms have been part of humans' awareness since their beginning. Fungi didn't enter into our artistic consciousness in a big way until the early Renaissance, when paintings began to reflect realistic landscapes and objects.

Originally created a decade ago, The Registry of Mushrooms in Works of Art has been reconstructed, revitalized and nearly doubled in size. The Registry is sponsored by the North American Mycological Association and is now on our website: http//:namyco.org/art_registry/index.html.

The first version of the Registry was hosted by NAMA from 2003-2006, and was compiled by Elio Schaechter, Hanns Kreisel, and Tjakko Stijve. The newly revised Registry was compiled and curated by Elio Schaechter, Nancy Mladenoff and Daniel Thoen. Marjorie Young was instrumental in formatting the pages and David Rust created the new website. The new Registry includes over 1,200 entries, mainly European paintings and many works of modern times.

The stated purpose of the Registry is: *"To contribute to the understanding of the relationship between mushrooms and people as reflected in works of art from different historical periods, and to provide enjoyment to anyone interested in the subject."*

The Registry is subdivided into the following art periods:

- Gothic and early Renaissance
- High Renaissance
- Italian, Dutch, Flemish, German, and French Baroque
- Romanticism and Neoclassicism
- Victorian Fairy Paintings
- Mid-19th century to mid-20th century
- Post 1950 and Mushrooms in Modern Media

The Registry is also organized by additional links to several myco-prolific Baroque artists: Karl Hamilton, Paolo Porpora, Pseudo Fardella or Painter of Carlo Torre, and Otto van Schriek.

Top right picture is 'Brave New World', by Megan Aroon-Duncanson. Middle left painting is 'Fruit Stall', by Frans Snyders.

About the Author

Elio Schaechter's hobbies include studying wild mushrooms and hiking. He edited the Bulletin of the Boston Mycological Club from 1973 to 1995 and received the NAMA Award for Contributions to Amateur Mycology in 1993. He also helped found the San Diego Mycological Society, a thriving organization. In 1997, Schaechter wrote *In the Company of Mushrooms*, published by Harvard University Press. He served as president of the American Society for Microbiology from 1985-1986, and now co-authors a fascinating blog, Small Things Considered, where he often expounds on unusual and unexpected phenomena in the microbial world.

The Registry is an open-ended endeavor and will continue to evolve in the coming years. We hope that it will encourage you and your kindred fungiphiles to look for mushrooms in works of art.

COMMON NAMES AND LATIN NAMES

Online discussion groups are an important source of information and viewpoints on mycology for participating members. The following discussion is in response to an article about dropping Latin in exchange for common names. The authors, John Plischke, Bill Yule and David Spahr, have given permission to print their comments.

On January 19, 2012 in the Tribune Review newspaper, the headline of an article read "Botanists Agree to Drop Latin Naming." I think there are a number of reasons for this, one of which is that there are literally hundreds of thousands of amateur botanists, mycologists, and ornithologists, and others. Most of these people, like the huge majority of members of our club know very little Latin. I think it would be safe to say that most don't really care about the Latin name. Latin has been a dead language for thousands of years. It is described in the Trib, "Latin is a bit like a zombie, dead but still clamoring to get in our brains." The Trib reports, "Latin just got a bit deader." Although the article was a little ambiguous, I think what they were talking about is that the description no longer has to be in Latin, it could also be described in English.

Those who know me know that I have long been a proponent that local mushroom clubs should definitely not exclude the use of common names. As a matter of fact, it is my contention that if we only used one name, we should use the common name. I think my son John Plischke III has it right, at a club event he generally uses both the common and Latin names, so those who wish to pursue a doctorate in mycology, which most of us don't have any interest in doing, can learn the Latin, but the rest of us can use the common name if we wish, which will speed up the learning process. I would venture to say that almost everybody in our club knows the sheep head, the stump mushroom and the morel. Far less people know the Latin names. I personally know a lot of Latin names, but I am not a snob and have always at the local club level talked in English. When at a NAMA event, I talk Latin. The average level of knowledge at NAMA events is higher that at a local club.

This is not a new concept. Dr. Tom Volk, a few years ago, proposed that we have a standardized common name for each mushroom. The author of the article in the Trib said this decision was not a unanimous one, he relayed that Roy Gerbau opposed the decision. That creates another problem, one that I encounter at some NAMA events. The problem is, which of the many Latin names that most mushrooms have had are we supposed to use? Many mushrooms have had scientific Latin name changes many times. This is rampant at the present time with the DNA testing that is going on. For example, some puffballs are going to be called boletes and some boletes called puffballs. Just 25 years ago, I learned Boletus separans, it is no longer called Boletus separans. Dr. Alan Bessette, whom I admire greatly, changed the name to Xanthoconium separans, in his book, North American Boletes. Did he have a good reason to do so? I am sure he did. Has the name changed since? Could be? Many have changed multiple times.

The amateur mycologist that I know, who know the most number of the very latest Latin names is someone that many of you have met, our friend, Noah Siegel. Last year, he was told at the NAMA foray, "Don't use those latest Latin names, we don't know them. Talk so we can understand you." Then there is the problem of whether or not the name is going to be accepted by the professional community. Not all name changes are.

Communication only happens when someone understands the words being used. A couple years ago I was at a NAMA Foray in Louisiana; Dr. Tom Volk discussed this very subject. In attendance were most of the Ph.D. mycologists that attended the foray. When Tom said, "Call it what you want to call it;" Dr. Ron Peterson, retired professor of mycology at the University of Tennessee at Knoxville, jumped up and said, "Yesssss!!!" Other Ph.D.'s agreed.

I am by no means saying that the club should have a policy that excludes the use of Latin, but if Latin is to be used, I believe it should be the policy of the local club to also use the common name. What do you think?

In a way, some of the members of the scientific community are hypocrites, while this is going on MSA, the Mycological Society of America, has recently adopted a policy of not publishing new mushrooms unless DNA studies have been conducted on the mushroom by the author. I am sure they have a good reason for doing this, but it creates another problem. Dr. Rod Tulloss, the country's leading Amanita expert, can no longer publish articles in the scientific journal. He is not connected with a large university that can do DNA testing. Since he is retired, he cannot have the DNA testing done at an independent lab. There is no better person to name new Amanita mushroom species than Rod Tulloss. His descriptions are exact. At the Mount Alto NEMF Foray a few years ago, I told Gavin Farkas to sit down and listen to Rod describe a mushroom, while Rod's wife Mary took notes. He was amazed at how thorough and exact the description was. Rod now can no longer publish new species of mushrooms in the MSA scientific journal unless somebody does the DNA testing for him.

John Plischke

Interesting ideas. For quite some time taxonomists have been divided about dropping or keeping the entire Linnaean hierarchy, scientific names and all, and adopting a different system. I don't think that there's any agreement about what would take the place of Latin names: Barcode? Numbers? Cladograms? I think the important part of this is that it stimulates discussion. I think the question is what do we name things that will lessen confusion and give everyone the best information about the organisms we talking about?

Like Big John and John III, I also use scientific names when I interact with professionals and common names on casual forays and both at amateur gatherings. I think that one thing most amateurs don't appreciate is that when a professional mycologist publishes a paper and uses a new scientific name for a mushroom that we all may know it doesn't mean that the new name is automatically accepted by the mycological community. There is an informal probationary period while other professionals have

time to consider the merits of the name change and gradually accept it or reject it. A published name change within a professional article is a hypothesis about that organism that needs to be reviewed and scrutinized. I think that, without criticizing any particular person, that there is a slight tendency for some people to immediately adapt newly published names as if they are automatically accepted because they've been published by a professional journal. This is not a useful practice IMHO. On the other hand there's also a tendency to NOT accept name changes proposed by skilled amateurs that are not connected in the accepted professional channels as Big John describes in his post.

I don't see botanists or any other scientists dropping Latin names any time soon. This controversy has been on-going for a decade at least and no doubt will continue. I don't see any reason for amateurs to accept new names for old mushrooms until they've been batted back and forth among the professionals for enough time to weigh the merits of the change. I'm happy to admit that these are my ideas as an amateur and a layperson and that professionals may have an entirely different take on all this.

Bill Yule

I can't imagine that numbers would be the least bit useful. Wouldn't barcoding and cladograms go together? Wouldn't the barcode just show where a species belongs on the cladogram? Even with a cladogram wouldn't you need the names? Things would/do just shift around to their proper (?) location on the chart. There will be splits, synonymy, and plenty of name changes. http://www.dnabarcoding101.org/?gclid=COm_suzI3K0CFeYSNAodKATm5g. It seems to me that throwing out the Latin names would be throwing the baby out with the bath water. You still have to call them something. I was reviewing "The Mushroom Trail Guide" by Phyllis Glick recently, and noted that she was commenting (grousing) about lots of taxonomic changes going on. That was 1979.

DNA will continue to be sorted out no matter what anyone would prefer. Taxonomic changes may come at a dizzying rate. Get used to it. Once most fungi have been mapped the Linnaean system will be an artifact or it will just change to agree with the cladogram.

I guess you could argue that we name things in a modern language that most can understand rather than a language that is as dead as a hammer. I'm guessing that English is the most universal language. What if it were Chinese? Most scientific papers are in English I think. Not that it is really Latin anyway, but dead languages don't change (except in taxonomy) and we would miss out on the hilarity of listening to the different mycologists and assorted mycophiles pronounce these names. I find it most entertaining! As Dick Grimm says "Latin is a dead language and everyone takes a turn killing it".

David Spahr

NEMF 2012 - Annual Foray of the Northeast Mycological FederationAugust 2-5, 2012 at East Stroudsburg University

The Northeast Mycological Federation will hold its 2012 Samuel Ristich Foray at East Stroudsburg University (ESU) in East Stroudsburg, PA. ESU is easily accessible from I-80, only 50 miles from Morristown, NJ and 78 miles from NYC. We will be observing a bit of mycological history in returning to the site where in 1982, NAMA and NEMF held a joint foray, making this the 30th anniversary of the event.

The venue is well suited to host our foray, with BRAND new air-conditioned dorms completed in January 2012. The dorm layouts are all in suites where bathrooms are shared with no more than one other person. Programs and lectures will be held at the state-of-the-art auditorium and science center. As for the dining hall, those of you who remember the food served 30 years ago should fear not, for there is no resemblance between the food of that time and the food we tasted during our recent planning visits. There is plenty of elbowroom in the air-conditioned exhibition area for the displays, the mycologists and the vendors. There is no need to huff/puff up and down hills since all of the buildings are within 2-3 blocks of each other and the place is relatively flat.

The list of faculty is impressive. Our Chief Mycologist will be Else Vellinga. Others invited are: Alan Bessette, Arlene Bessette, Walt Sturgeon, Roy Halling, Jay Justice, Rod Tulloss, Gary Lincoff, Renee LaBoeuf, Rick Kerrigan, and Noah Segal. Then we also have Bill Yule, Roz Lowen, Doug Bassette, John Plischke, Jr., Katie Hodge, Glenn Freeman, Walt Sundberg and Michael Warnock. The Program Chair, Glenn Boyd, will be finalizing this already impressive line of faculty as we get confirmation from the invited mycologists.

There are many excellent foray sites within a short distance from ESU. Our Foray Walks Chair, Patricia McNaught, has selected sites and when (not if) we get good soaking rain, we will collect many interesting mushrooms. ESU is close to the beautiful Delaware Water Gap National Recreation Area, Worthington State Forest, Hickory Run State Park, Promised Land State Park, Appalachian trails, the Pocono Mountains and many PA Game Lands. The mixed forest of hemlocks and oaks offers diversity and abundant fungal life. If you prefer to simply commune with nature, you can feast your eyes on many waterfalls and feed your soul with lakes and gorges.

Meal plans will include 9 meals: Thursday (dinner), Friday and Saturday (breakfast, lunch and dinner) and Sunday (breakfast and lunch). If a foray isn't your thing, plan on some hiking and be sure to bring your hammer to the Ringing Rocks (in the Boulder Field at Hickory Run State Park) or try your luck at the nearby casino. There will be plenty to do.

Register early and think rain so we can have some fun. Registration will open on or before January 15, 2012. To download forms to register and for more information, continue to check www.nemf.org, www.nemf2012.org, or email **nemf2012@comcast.net**.

Summary of the 2011 NAMA Toxicology Committee Report North American Mushroom Poisonings

By Michael W. Beug, PhD, Chair NAMA Toxicology Committee
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In 2011, for North America, we learned of 117 people seriously sickened by mushrooms. Thirteen cases involved ingestion of either "Destroying Angel" or "Death Cap" mushrooms in the genus *Amanita*. There was one death and two people needed a liver transplant after ingestion of a "Destroying Angel", presumably *Amanita bisporigera.* Three cases, including one death, involved amatoxins from a *Galerina*, presumably *Galerina marginata*. There was one case of kidney damage after consumption of *Amanita smithiana* and a second case of kidney damage involving two women who consumed an unknown mushroom. The year was noteworthy for the large number of reports of problems from consumption of morels with 22 cases (18.8% of the total). A number of problems were the result of people consuming morels raw – but everyone recovered within 24 hours. The eighteen *Chlorophyllum molybdites* cases (15% of the total) were sometimes quite severe and often required hospitalization. While *Gyromitra* cases numbered only nine (eight *Gyromitra esculenta* and one *Gyromitra montana*), four required long hospitalizations as a result of liver damage. In the Northeast, newspaper reports mention long hospitalizations from some of the mushrooms known to cause gastro- intestinal distress, but we have no information on those cases. Twenty-seven reports of dogs ill after eating mushrooms included thirteen deaths of the dogs. The dog deaths were mostly attributed to ingestion of mushrooms containing α-amanitins, including probable *Amanita bisporigera, Amanita ocreata* and *Amanita phalloides*, though in at least one case the possibility of a deadly *Galerina* cannot be ruled out. There was one dog case involving liver damage from a deadly *Conocybe* but that outcome is unknown. *Inocybe* species led to five serious poisonings in dogs.

As has frequently been reported for morels in the past, several people learned the hard way that morels also must be thoroughly cooked prior to consumption. Raw, they can cause a serious bout of vomiting and diarrhea. Also, eating a lot of morels over the course of a week or so eventually can lead to sensitization. One individual got quite sick at a meal of morel mushrooms after eating a lot of them over the course of a week (something that I, myself, often do). Similarly, a woman reported that she had eaten morels for years, had a meal this past year where she got mildly sick and then consumed them one more time and had violent GI distress. A professional mycologist from Washington State also contacted me about his wife's adverse reaction to yellow Chanterelles, which she had eaten and enjoyed for years. An almost identical report for yellow Chanterelles came in from Southern Oregon as well. In another edible mushroom case gone badly, an Oregon woman consumed "Honey Mushrooms," apparently *Armillaria solidipes*. Her comment to me was why aren't people warned that GI distress can mean symptoms so violent that you honestly believe that you are going to die. Be warned.

Poison Centers frequently issue alerts to never eat wild mushrooms and that "experts" are easily fooled. As an "expert" there a few rules that I follow to help keep from poisoning myself. The first rule is to never eat an all-white mushroom. You risk death from mistakenly eating a deadly Amanita, or loss of kidney function from *Amanita smithiana* and some closely related amanitas. More than one person did

eat deadly *Amanita* species this year, one died and two others required a liver transplant. One couple ate an all-white *Entoloma* in the *E. sinuatum* complex – they did not die but suffered 5 hours of violent, painful vomiting and 36 hours of diarrhea followed by 6 hours in the hospital connected to IVs. I not only do not eat all-white mushrooms, I do not eat pink-spored gilled mushrooms – too many of them are poisonous. In their email to me (accompanied with a photograph), they were concerned that they may have poisoned themselves with α-amanitins (a real possibility from the top-down photo they sent in which I could glimpse white gills in the picture but could not see any part of the stalk). But alarm bells really went off when they were worried that it might have been a *Cortinarius* (rusty-brown spore-print) or a brown *Paxillus.* This brings me to a second rule: join a club and learn to mushroom with people who actually know how to identify mushrooms. Do not eat a mushroom you cannot positively identify and check your identification before eating the mushroom, not afterwards. Another all-white mushroom, *Amanita smithiana,* was correctly identified immediately after eating it! In two separate incidents, individuals consumed *Chlorophyllum molybdites* thinking that they were eating "Shaggy Manes." Both are shaggy and have free gills. But let's review the "subtle" differences. Shaggy Manes are tall and cylindrical (bullet-shaped) with black spores, have soft flesh, and quickly turn to black ink. *Chlorophyllum molybdites* is broad with a convex to plane cap, has a distinct ring on the stalk, initially white spores that turn olive-greenish at maturity, firm flesh, and does not turn to black ink. I can understand mistaking a Shaggy Parasol mushroom (*Macrolepiota procera*) for a *Chlorophyllum molybdites* (and that did happen last year) but mistaking a Shaggy Mane for *C molybdites* takes a supreme degree of ignorance of taxonomy. I do not eat brown-spored gilled mushrooms either, especially little brown mushrooms. Consumption of *Galerina* species resulted in one death this year and two other cases of serious liver damage. One dog had serious liver damage from consumption of a *Conocybe* species.

Another rule that one woman might not have been aware of (besides to never eat a mushroom you cannot positively identify), is never eat a bolete with red tube mouths. Sure, some of the red-tubed boletes are edible, but at least one causes sufficiently violent gastric distress that death can be the ultimate result. She merely suffered mild gastric distress. I quit eating any species of *Gyromitra* 30 years ago, and even when I did eat them, I always cooked them thoroughly and did the cooking out of doors to both destroy and safely volatilize any gyromitrin that may have been present. This year four of nine people hospitalized after eating *Gyromitra* species suffered mild to severe liver damage. I also thoroughly cook any mushroom I am going to eat and never add sliced raw *Agaricus* to my salad when at a salad bar. All edible mushrooms are more digestible after cooking and some contain heat labile toxins [notably morels, verpas and gyromitras but also Shiitake (*Lentinula edodes*) and *Lepista nuda*]. Above all, never forget that mushrooms containing α-amanitins (some *Amanita, Galerina*, *Lepiota* and *Conocybe* species) remain toxic no matter how the mushroom is cooked. Allenic norleucine (the toxin in some other *Amanita* species that causes kidney damage) is not destroyed by cooking either. Nor is orellanine, a toxin found in some *Cortinarius* species. Orellanine results in loss of kidney function and can cause death.

For dogs, most serious poisonings are attributable to consumption of deadly *Amanita* species. The year 2011 saw many deaths of dogs from consumption of poisonous mushrooms. Dog poisonings from species of *Inocybe* were also often very serious and can lead to death of the dog.

(A more detailed toxicology report is in the on-line version of McIllainea. http://www.namyco.org/publications/mcilvainea/mcil_journal.html).

Editor: Mycologists and clubs are encouraged to send your articles, recipes, puzzles, etc. for possible inclusion in ***The Mycophile*** *to diannasmith@optonline.net. Deadline for the next issue is May 1st.*

Guidelines for submitting manuscripts to Dr. Michael Beug for ***McIlvainea*** *can be found at http://namyco.org/publications/mcilvainea/mcil_instructions.html.*

Toxic Polypores - Polyporic Acid in Fungi

By Michael Beug, PhD
Chair NAMA Toxicology Committee

I, and it turns out many other people who give talks about fungi, have long considered polypores to be non-toxic. But for the most part, who would want to eat them? Very few are fleshy and tasty. However, since much of the interest surrounding the medicinal use of mushrooms involves polypores, I began to worry about individuals self-medicating with polypores they find in the wild. It started with a conversation with a friend I encountered while walking through her woods in early January. I had just found a polypore unlike anything I had ever seen and was heading home with a discretely sampled part of it. Our conversation turned to medicinal mushrooms and she told me of mushrooms collected for her husband by a wild crafter when he was battling cancer. I did not think much about it then; I had a mushroom to identify.

At home, I cut out three little pieces of the polypore and placed them in a spot plate. A drop of KOH turned the first piece dark red. The second piece got a drop of Melzer's reagent – no reaction. Since I study *Ramaria* species, I tried a drop of $FeSO_4$, an important reagent for that genus, and the third piece with $FeSO_4$ turned dark green. I could find nothing in the books I had on hand about a dark green reaction of polypores with $FeSO_4$, but a dark red reaction to KOH brought to mind a 2001 paper from Mycologia about *Hapalopilus*. They mention a cherry red reaction for the European *Hapalopilus rutilans* (Pers.) Murr. and their DNA work demonstrated that the European species is the same as the American species that we call *Hapalopilus nidulans* (Fr.) Karst. (Ko, et al, 2001). They also mention that *Hapalopilus nidulans* contains up to 40% by dry weight polyporic acid and that that compound is responsible for the reaction with KOH. More importantly, polyporic acid (a dihydroquinone derivative) causes damage to kidneys and central nervous system function. Three people were poisoned in Germany in two separate incidents, one in 1986 and one in 1987. Had I found *Hapalopilus nidulans*? I did the microscopy, the hyphae were right; the spores looked like they fit. But I was worried that my mushroom was far more hairy than the description seemed to indicate for *Hapalopilus nidulans*. I couldn't find a good picture.

Hapalopilus nidulans *by Dorothy Smullen*

I posted a note to the toxicology identifiers alerting them to *Hapalopilus nidulans* and attaching my image. I soon received genuine pictures of *Hapalopilus nidulans* and it was clear that I had a different mushroom. But did the color reaction indicate polyporic acid? It turns out that North American material turns a beautiful lilac to violet with KOH while the same species in Europe turns cherry red. Maybe my mushroom has polyporic acid, I don't know. There are other polypores known to contain polyporic acid. They include *Porostereum friesii* (Lév.) Horst. & Ryv. = *Lopharia papyraceae* (Jungh.) Reid and *Phanerochaete filamentosa* (Berk. & Curt.) Burds. = *Rhizochaete filamentosa* (Berk.

& M.A. Curtis) Gresl. Ko et al (2001) demonstrated that the ability to produce this acid has evolved three or four times in polypores and we do not yet know all of the potentially toxic species. Polyporic acid is the active ingredient in at least one Chinese herbal medicine (Gui Zhi Fu Ling), which is made from some species of *Poria*. I certainly would not use any polypore that turns red or violet in KOH as a medicinal mushroom. I place too high a value on having functioning kidneys and am not desirous of damaging my brain.

By the way, I now think that my mystery mushroom, which I have dubbed the rainbow sherbet polypore, is closely related to *Pycnoporellus fulgens*. As soon as the snow and ice storm I am experiencing as I write this subsides and I can post a sample, I will mail my mystery mushroom to a polypore expert and see if I came closer this time.

Among the people who collect mushrooms for natural dyes, *Hapalopilus nidulans* is very highly valued for the lovely purple colors that it produces. I wonder if *Porostereum friesii* and *Phanerochaete filamentosa* may also prove of value to the dye crowd? Just do not try them for medicinal effects. They are most certainly all three toxic. Don't try consuming certain dye lichens either; you might die as a result. Dorothy Smullen uncovered the fact that two *Sticta* species contain polyporic acid. Also *Letharia vulpina*, which was used historically in Europe and in western North America to poison wolves, contains the yellow pigment vulpinic acid, which is a member of the polyporic acid family of compounds. It turns out that fungi produce a wide range of derivatives of polyporic acid to act both as antibacterials and as fungicides directed against other fungi.

Hapalopilus nidulans *by Sue Hopkins*

An expanded version of this note with more detailed references has been published in the 2012 issue of McIlvainea.

Reference

Ko, K.S., H.S. Jung and Lief Ryvarden. 2001. Phylogenetic relationships of *Hapalopilus* and related genera inferred from mitochondrial and small subunit ribosomal DNA sequences. *Mycologia* **93**(2): 270-276.

In addition to NAMA and your local clubs, please support MUSHROOM THE JOURNAL www.mushroomthejournal.com/
and FUNGI Magazine www.fungimag.com/

Editor: We wish to acknowledge an error from the previous issue's article by Andrew Wilson on *Calostoma* concerning the misspelling of Brandon Matheny's name.

Boletus huronensis: How to Recognize It and Avoid a Potentially Debilitating Poisoning. *By Bill Bakaitis*

On August 30, 2008, in coastal Maine, I collected and photographed a bolete that was new to me. From the description and photos in Bessette, Roody, and Bessette's *North American Boletes: A Color Guide to the Fleshy Pored Mushrooms* I was reasonably confident that it was *Boletus huronensis*:

> **"Pileus**: 2-10" (5-25.5 cm) wide, convex, becoming broadly convex or irregularly expanded in age, margin with a narrow band of sterile tissue, incurved to inrolled at first, often wavy to irregular in age; surface dry, subtomentose to glabrous, dull yellow-brown, ochre-brown, or pale cinnamon-brown; context pale yellow, typically bluing when cut, but sometimes slowly or not at all; odor of mercaptan or not distinctive; taste not distinctive.
>
> **Pore surface:** yellow at first, becoming olive-yellow to brownish-yellow at maturity, often depressed near the stipe in age, staining greenish-blue, sometimes slowly or erratically when bruised, finally reddish-brown; pores 1-3 per mm, tubes 1-3.5 cm deep.
>
> **Stipe:** 3-8 " (8-20 cm) long, 3/4-3" (2-7.5 cm) thick, enlarged downward, dry, solid, not reticulate or only so at the very apex, finely tomentose below, yellow at the apex, pale yellow to whitish below, sometimes with ochre or dull reddish tints; partial veil and annulus absent.
>
> **Spore print color:** olive-brown.
>
> **Macrochemical tests:** pileipellis produces a green flash, then stains orange with the application of NH_4OH, pale orange with KOH, and bluish olive-gray with $FeSO_4$; context stains orange with the application of KOH, pale grayish with NH_4OH, and bluish olive-gray with $FeSO_4$.

Microscopic features: spores 12-15 x 4-5 µm, elliptical to oblong, smooth, pale yellowish brown.

Fruiting: solitary, scattered, or in groups on the ground under hemlock; July-October; infrequent; eastern Canada south to New York and Connecticut, west to Michigan.

Edibility: edible [*In a private correspondence, the authors stated that they are inclined to reconsider mentioning edibility in light of recent evidence.*]

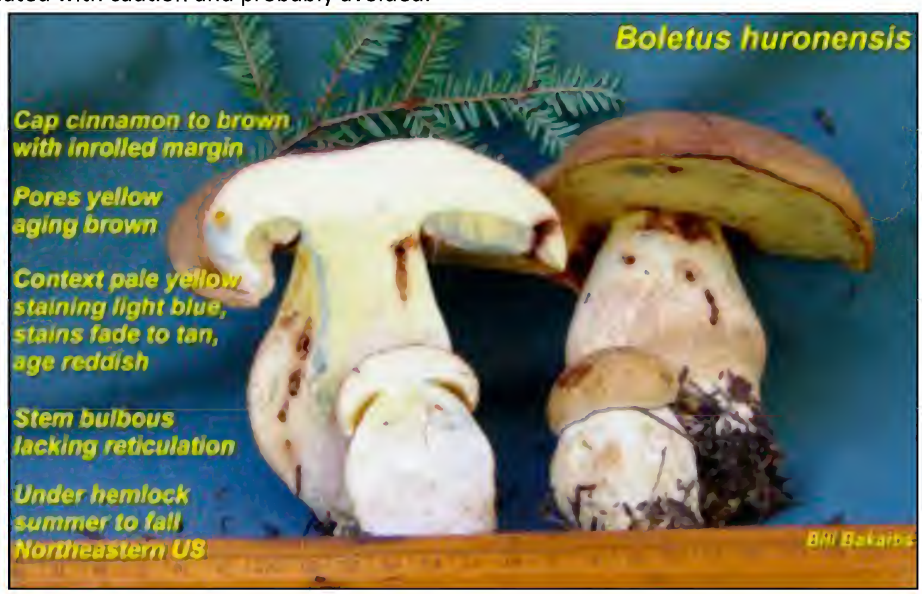
Comments: This mushroom is sometimes misidentified as the European *Boletus impolitus* Fries, which does not stain blue on its pore surface or cut context and grows in broad-leaf forests. Its existence in North America is doubtful. *Boletus pallidus* Frost is smaller, lacks reticulation on the stipe, and has a whitish to buff or pale gray-brown pileus."

An excellent 3x5" color photograph of a single mature specimen appears on p. 290.

The day had been very productive and my wife, Leslie, and I had dozens of species carefully segregated in our baskets. With time being limited and mushrooms abundant, I simply lost track of this collection. One image shows it carefully field dressed for the kitchen and Leslie is quite sure it ended up in the pot. If so, the culinary aspects were no more pronounced one way or another from any of the other good Boletes we ate that week.

However, for some people who eat this species, the result is very severe gastro-intestinal distress. Andrus Voitk wrote a particularly graphic description of the exceptionally severe gastrointestinal distress that can occur following consumption of what he later concluded must have been *B. huronensis* that he had consumed after mistaking it for *Boletus edulis* (http://www.namyco.org/images/publications/6_Andrus.pdf).

Subsequent to this exchange I learned from knowledgeable amateur mycologists of a few more cases with descriptions of intense debilitating vertigo and digestive distress following the eating of *B. huronensis*. There now seems to be a general awareness that this mushroom should be treated with caution and probably avoided.


Boletus huronensis
Cap cinnamon to brown with inrolled margin
Pores yellow aging brown
Context pale yellow staining light blue, stains fade to tan, age reddish
Stem bulbous lacking reticulation
Under hemlock summer to fall Northeastern US
Bill Bakaitis

Gary Lincoff's recent guide for foragers, *The Complete Mushroom Hunter* (2010), mentions that *huronensis* even after cooking "will give you a bad night nonetheless" and that drying or storage does not lessen the toxic effects. His description (p. 148) of *huronensis* concentrates on a comparison to *B. edulis*, most notably the white net-like reticulation on the top of the stem for *edulis* which is lacking in *huronensis*, the non bluing reaction of the cut flesh of *edulis* compared to the slow bluing reaction to the cut flesh of *huronensis*, and the white flesh of *edulis* compared to the yellow flesh which stains blue in *huronensis*. There are two 2x3" images of *huronensis*, but unfortunately the color saturation and quality does not permit the subtle tones to register.

In a similar fashion, Greg Marley in *Chanterelle Dreams, Amanita Nightmares* (2010) also mentions *B. huronensis* in his treatment of *B. edulis*, making the case in one well crafted paragraph (pp. 75-76):

> "In the Northeast, one porcini look-alike has been implicated in several sickenings. It is *Boletus huronensis,* and although some guides call it edible, there have been a few cases of people becoming sickened following a meal of this mushroom. It can be differentiated from porcini by the pore surface that stains slowly blue upon bruising, the yellowish stem color, often with traces of red, and the lack of fine net-like veining on the stalk. Don't eat these mushrooms."

This article is extracted from a more detailed article to appear in the 2012 issue of McIlvainea. Go to www.namyco.org/publications/mcilvainea/v21/Boletus_huronensis.html to read the full article online and see additional images, images that you are free to use for educational purposes if you credit the photographer, Bill Bakaitis.

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CULINARY CORNER

Asparagus & Morel Linguine with White Wine Mornay Sauce

Created by Andrew MacMillan

Description
A little bit spring, a little bit locavore, a lot yummy!

Ingredients

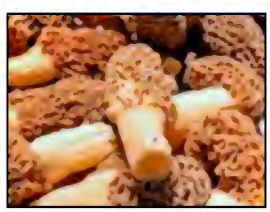
- 1.5 lb. asparagus, trimmed, cut into 1-2" diagonals
- 3/4 lb. fresh morels (2 oz. dried, soaked in warm water, squeezed of water), cut crosswise into 1/4" rings
- 6 spring onions, white part minced, greens sliced in thin diagonals
- 8 oz. linguine
- 5 T. butter
- 3 T. flour
- 1 bay leaf
- 1 C. dry white wine
- 1 t. salt
- 1/8 t. white pepper
- 1 C. half-and-half
- 4 oz. fresh goat cheese
- 1 oz. grated sharp cheddar
- 1 oz. grated Parmesan

Methods/Steps

1. Cook the linguine in well-salted water until al dente.
2. Melt 3 tbs. butter over medium-high heat in a medium saucepan. Add the flour and bay leaf, stirring constantly for 1 minute or until lightly frothy. Whisk in the half-and-half and continue to whisk until the sauce simmers. Add 3/4 C. wine, 1/2 tsp. salt and the pepper and cook until the sauce thickens and simmers. Reduce heat to medium-low and stir in the cheeses. Continue to stir until cheeses are melted.
3. In a very large skillet, melt the remaining 2 tbs. butter over medium heat. Add the morels and sauté for 5 minutes. Add the minced white portion of the green onions and sauté for 1 minute. Add the asparagus, the remaining 1/4 C. wine, and 1/2 t. salt. Braise covered for another 5 minutes or until asparagus is just tender.

Drain the pasta thoroughly and add to the mushroom/asparagus skillet. Remove the bay leave and add the sauce. Add the green part of the green onions. Toss everything together and serve immediately.

(Andrew MacMillan is a member of the Kitsap Peninsula Mycological Society (www.kitsapmushrooms.org/). More of his mushroom recipes can be found at www.wildmushroomrecipes.org)



FUNGI IN THE NEWS

Brain scans reveal the surprising secret of magic mushrooms' hallucinogenic effect.
By Ruth Williams of *The Scientist*, January 23, 2012, http://the-scientist.com/2012/01/23/scanning-the-psychedelic-brain/

Bacteria Tend Leafcutter Ants' Fungal Gardens, Science Daily (March 1, 2012) **http://www.sciencedaily.com/releases/2012/03/120301084144.htm?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+sciencedaily%2Fplants_animals%2Ffungus+%28ScienceDaily%3A+Plants+%26+Animals+News+--+Fungus%29**
Fresh Air **on NPR radio features an interesting interview with biologist and mycology author Nicholas Money**. http://www.npr.org/player/v2/mediaPlayer.html?action=1&t=1&islist=false&id=145339196&m=145394446

Fungi Get the Lead Out: Certain species of fungi can convert lead into stable mineral forms, hinting at new strategies for bioremediation. http://the-scientist.com/2012/01/13/fungi-get-the-lead-out/

Fungi Eat Plastic! http://www.fastcoexist.com/1679201/fungi-discovered-in-the-amazon-will-eat-your-plastic

Time-lapse video of mold on YouTube video.http://www.youtube.ug/watch?v=JsQHWj2RfXg&feature=related

Amazon fungi found that eat polyurethane, even without oxygen. http://www.physorg.com/news/2012-02-amazon-fungi-polyurethane-oxygen.html

Genetically Modified Trichoderma Produce Cheap and Eco-friendly Phamaceuticals from Crab Chitin. http://www.sciencedaily.com/releases/2012/02/120213083850.htm

Adventures in Fungal Wonderland In October 2011, Cornell University's Mann Library invited members of the community to send their photographs of the season's fungal splendor. They received many wonderful responses, some taken with impressive cameras, some with pocket point-and-shoots. The photographers included children and adults, hikers, birders, professional mycologists, gastronomes, and pedestrian commuters who looked down and were moved by the beauty at their feet. On display in Mann's Top Shelf Gallery through April 2012, "The Other Side of What?" is an exhibition that captures some of what they saw, offering an astonishing array of mushroom shapes, colors and settings. Visitors exploring this fungal wonderland are warmly invited to help find fitting common names for a few of the most intriguing species it features—and be entered into a raffle for a mushroom guidebook that will likely serve them well as the Spring mushroom season begins to unfold later this semester. **A virtual view of the exhibit is also visible here**. Those interested in cultivating their own mushrooms can participate in the next Camp Mushroom hands-on workshop, to be held April 13 and 14 at Cornell's Arnot Teaching and Research Forest. Cabins, dinner and breakfast are available for those who wish to stay overnight at the forest. More information and registration here.

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Newsletter of the North American Mycological Association
THE MYCOPHILE

Leptonia carnea is one of the most striking mushrooms in the world - its iridescent indigo colors are indescribable, but at the very least can be called breathtaking. This species has been recorded from as far north as Humboldt County and as far south as Big Sur, but is entirely restricted to the narrow strip of California's fog-shrouded coast where the giant Redwood trees are found.

It is apparently quite rare throughout most of this range, but is known from at least 9 different localities on the UC Santa Cruz Campus. This area will be one of the foray locations during this December's national NAMA Foray in Scotts Valley, CA. Join us this winter, and you might become one of the lucky few who have seen this magnificent mushroom emerging from the needle duff of a towering centuries-old Redwood.

Photo and text by Christian Schwarz